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REMARKS

Claims 1-22 are pending in the present Application, with claims 20-22 withdrawn from consideration. No claims have been amended or canceled, leaving Claims 1-19 for consideration upon entry of the present Response. Reconsideration and allowance of the claims are respectfully requested in view of the following remarks.

Claim Rejections Under Obviousness-Type Double Patenting

Claims 1-19 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of copending Application No. 10/797975. Applicant respectfully requests that the examiner withdraw the "provisional" obviousness-type double patenting rejection until the claims are in final form and condition for allowance; until such time, there is no double patenting and no way to determine double patenting. MPEP § 804.01.I(B)(1).

Claim Rejections Under 35 U.S.C. § 102(b), Or, In The Alternative, Under 35 U.S.C. § 103(a)

Claims 1-19 stand rejected under 35 U.S.C. § 102(b) as allegedly anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as obvious over Podszun et al. (U.S. Patent No. 6,365,066). Applicants respectfully traverse this rejection.

The present claims are directed to an antifouling coating that effectively releases biocidal metals from the exterior surface of the coating. Claims 1-5 of the present application are directed to an article comprising an inorganic biocidal agent wherein the article has a biocidal metal release factor greater than 2.5. The biocidal coating of the present claims can therefore advantageously reduce the growth of pathogenic organisms due to the effective release of biocidal metals. Further, claims 6-19 are directed to an article having a textured exterior surface. Applicants have discovered that a textured exterior surface has the unexpected property of improving the biocidal metal release properties of the coating. As shown in Tables 6 and 7 of the Application, the texturing of an exterior surface significantly improves the metal release properties of the coating.

Podszun et al., in contrast, is directed to biocidal articles that do not release metals. The antifouling coatings of Podszun et al. are applied to articles in contact with sea water to

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prevent infestation (i.e., attachment and growth) of benthic marine organisms without the environmental release of heavy metals. Podszun et al. state "[a]ntifouling biocides which contain heavy metals are particularly problematic, since they cause contamination of the sea water and of the sea bed, especially in the area of harbours." (Col. 1, ll. 29-34). While the compositions of Podszun et al. can comprise metal zeolites, it is admitted that such compositions have limited ecological advantage and are contrary to their goal. (Col. 8, ll. 7-27). Further, Podszun et al. do not disclose the amounts of metal zeolites that can be included in their compositions. It is likely that the amounts of metal zeolites added to the Podszun compositions would be too low to provide a significant release of metals into the sea water, which is consistent with their stated goal. Podszun et al. also fail to disclose or suggest texturing an exterior surface or that such texturing improves the metal release properties of their compositions, which is also consistent with their stated goal of reducing the release of metals into the environment.

The Examiner states he has a reasonable basis to believe the claimed biocidal metal release property, the exterior surface and texture properties, the biocidal activity, and the growth reduction to be inherent in the compositions of Podszun et al. based on the allegedly "substantially identical composition of the film and film thickness disclosed in Podszun et al." (Office Action at 5).

To anticipate a claim, a reference must disclose each and every element of the claim. *Lewmar Marine v. Barlent Inc.*, 3 U.S.P.Q.2d 1766 (Fed. Cir. 1987). The Examiner concedes that the cited reference does not teach a claimed limitation while, at the same time, states that the reference anticipates the present invention by inherency. However, anticipation by inherency only happens if the anticipating elements (1) are necessarily present and (2) one of ordinary skill in the art recognize or appreciate the inherent element. "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.'" *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999). Furthermore, "in relying upon the theory of inherency, the examiner must provide a basis in

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fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.” *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990); MPEP § 2112.

In relying on the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic *necessarily* flows from the teachings of the applied prior art. The passing disclosure in Podszun et al. of zeolites in an unspecified amount is not a factual or technical basis for inherency. In addition, it does not necessarily flow from the disclosure of Podszun et al. that the Podszun coating have effective metal-release properties. In fact, one skilled in the art would likely not include an amount of zeolite in the Podszun coating that would result in a significant metal release from the surface given the stated goal of reducing environmental metal release.

Claim 3 and Claims 6-19 of the present Application require that the article have a textured surface. There is no teaching or suggestion in Podszun et al. to texture a surface of the coating or film. In addition, there are no factual or technical grounds for asserting that the compositions in Podszun et al. inherently possess the presently claimed textured surface. There is no description in Podszun of texturizing the surface of an article, described in the present application as “that the surface layer is roughened in a manner and to an extent effective to produce a desired level of biocidal activity.” (Application, page 5) A smooth surface would correspond to the Examples of the present Application which are labeled “As such.” As shown in Tables 6 and 7 of the Application, the smooth surfaces of non-textured films exhibit less effective biocidal metal release properties.

In view of the differences between the heavy-metal-free biocidal compositions of Podszun et al. and the metal-releasing biocidal compositions of the present application, Applicants submit that there is no basis for an assertion of inherency as to the metal release properties and textured surface attained in the metal-releasing biocidal compositions that are presently claimed.

Furthermore, it is respectfully submitted that the Examiner has inappropriately used the doctrine of inherency in putting forth a rejection under 35 U.S.C. §103 (a). The courts have repeatedly made the distinction that “the inherency of an advantage and its obviousness

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are entirely different questions. That which may be inherent is not necessarily known. Obviousness cannot be predicated on what is unknown." *In re Spormann*, 150 U.S.P.Q. 449, 452, (CCPA, 1966), citing *In re Adams*, 53 CCPA 996, 356 F.2d 998, 148 U.S.P.Q. 742. "Further it confuses anticipation by inherency, i.e., lack of novelty, with obviousness, which though anticipation is the epitome of obviousness, are separate and distinct concepts." *Jones et al. v. Hardy*, 220 U.S.P.Q. 1021, 1025 (CCPA, 1984) citing *In re Pearson*, 494 F.2d 1399, 181 U.S.P.Q. 641 (CCPA, 1974); *In re Oelrich*, 666 F.2d 578, 212 U.S.P.Q. 323 (CCPA, 1981). "The examiner should be aware that inherency and obviousness are distinct concepts." *Ex parte GPAC Inc.*, 29 U.S.P.Q.2d 1401, 1415, n. 15, citing *In re Naylor*, 369 F.2d 765, 152 U.S.P.Q. 106 (CCPA 1966); *In re Henderson*, 348 F.2d 550, 146 U.S.P.Q. 372 (CCPA 1965). "The theory of inherency is normally reserved for rejections under 35 U.S.C. § 102." *In re Grasselli*, 318 U.S.P.Q. 303 (Fed. Cir. 1983). Withdrawal of the rejection of obviousness under inherency is respectfully requested.

For at least the foregoing reasons, reconsideration and withdrawal of the rejections under 35 U.S.C. § 102(b) and 35 U.S.C. § 103(a) are respectfully requested.

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance are requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 50-3621.

Respectfully submitted,

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